# Radioactive Material License Amendment Statement of Basis

Envirocare of Utah, Inc.

March 10, 2005

#### <u>Purpose</u>

The purpose of Statement of Basis is to describe changes to Radioactive Material License Number UT2300249; Envirocare of Utah (Licensee) commercial radioactive waste disposal facility. The proposed changes, if approved, will result in License Amendment 21. Specifically, the Licensee requested changes to: 1) License Condition 10, to expand its current operation to include approximately 536 additional acres. 2) the License's name from a corporation (Inc.) to a limited liability company (LLC); 3) incorporate Envirocare's portable gauge Radioactive Material License (RML) UT2300320, into RML UT2300249; 4)) change language in License Condition 39(E) from the 5 mR/hour on contact dose rate to 40 mR/hour dose rate at 1 meter, to be consistent with License Condition 76; 5) the Investigation level stipulated in the Radiation Safety Manual, ALARA Program, and; 6) License Condition 54, Site Radiological Security Plan. These changes are discussed in greater detail below.

# **Major License Changes**

## 1. Expand current operations.

The Licensee is requesting approval from the Division of Radiation Control (DRC) to expand its current operations into an additional 536 acres. The area has been subject to light industrial use over the years by Broken Arrow Inc., an Envirocare subcontractor. The area is adjacent to the north of Envirocare's current operations. The Licensee is requesting this expansion in order to build new waste handling facilities; rail line; administration building; and disposal cell. The planned expansion consists of approximately 536 acres.

RML UT 2300249, License Condition 10.A. states: "The Licensee may receive, store and dispose of licensed material at the Licensee's . . . " Recently, Envirocare purchased additional land from Cedar Mountain Environmental, the previous owner. The eastern portion of the region is owned by Envirocare and is used to support rail delivery from the main Union Pacific rail line. Cedar Mountain Environmental submitted a Siting Application on January 30, 2003. The State of Utah, Division of Radiation Control (DRC) reviewed and determined that the land meets the siting criteria found in UAC R313-25-3. This determination was explained in the Safety Evaluation Report dated September 13, 2004. The DRC provided Cedar Mountain Environmental with an approval letter dated October 8, 2004. It should be noted the Cedar Mountain Siting Application consisted of 387 acres. However, the DRC has no reason to believe the additional 149 acres, requested by Envirocare are not representative of the smaller area approved in the Siting Application.

Historically, the DRC has approved increases in disposal capacity, which met the requirements in Rule R313-25, on an "as needed basis" within the area. However, as part of this amendment, the Licensee must receive approval from Tooele County, responsible for local planning and

zoning; and, the approval of the Governor and the Legislature as specified in Utah Code, Title 19-3-105 (3) and (4).

After DRC review of the amendment request (CD05-0103) to expand, the Executive Secretary proposes the following conditions be placed in the License; such that prior to any waste management or transfer facilities are constructed in the new area, the licensee shall: 1) submit and obtain prior approval from the Executive Secretary for a revised Environmental Monitoring Program that complies with R313-25-26; 2) obtain written approval from the Executive Secretary prior to construction of significant facilities, which include but are not limited to: waste disposal units, waste management facilities, storm water, and wastewater related handling, storage, disposal and transfer projects; and 3) meet all the requirements in the licensee's Ground Water Discharge Permit No. UGW4500051). In addition, the Licensee shall, prior to any disposal cell construction; 1) have conducted a preoperational monitoring program as specified in R313-25-26(1); and 2) meet License issuance requirements specified in R313-25-11(3 through 9).

# 2. <u>Incorporate Envirocare's portable gauge Radioactive Material License (RML) UT2300320, into RML UT2300249</u>

The DRC decided that incorporating Envirocare's portable gauge RML No. UT2300320 will benefit the Licensee and the DRC. The benefits include: 1) increase oversight regarding the use and management of the portable gauges; 2) more frequent inspections regarding the requirements in the license; and 3) consistency with timely Licensing actions.

# **Minor License Changes**

### 1. <u>License's name from a corporation (Inc.) to a limited liability company (LLC)</u>.

Envirocare of Utah, Inc. has converted from a corporation to a limited liability company (LLC) and has requested all their Radioactive Material Licenses (RML) be amended to reflect this conversion. Envirocare requested the change in a letter dated December 23, 2004 (CD04-0549). The DRC acknowledged this request and indicated it would make the change during License Amendment 21.

#### 2. License Condition 39(E)

Envirocare has requested to change license condition 39(E) regarding the Containerized Waste Facility. Specifically, Envirocare requested to change the maximum 5 mR/hour on contact dose rate to 40 mR/hour dose rate at 1 meter, to be consistent with License Condition 76. The DRC acknowledged that the 5 mR/hour dose rate on contact applies to all packages in storage, whereas the 40 mR/hour applies to emplaced waste or shielding around disposed waste containers. The DRC has reviewed the request and determined there is no significant health and safety concern with eliminating the 5mR/hour contact dose rate, and applying the 40 mR/hour dose rate at one meter whether the package or container is in storage or the waste package has been placed in the disposal cell. The change allows the licensee a dose rate of 40 mR/hour at a distance of one (1) meter from all packages and containers, or shielding around

the waste package. Approval will allow License Condition 39(E) to be consistent with License Condition 76.

#### 3. License Condition 54

Envirocare requested changes to the Site Radiological Security Plan. License Condition 54 requires the licensee to maintain compliance with all conditions and requirements in the Site Radiological Security Plan dated June 27, 2002. Envirocare submitted a revised Plan that eliminates the self imposed security buffer zone around the facility. The DRC concurs with the licensee that other security measures are currently in place that provide adequate surveillance to preclude theft of waste material. The Radiological Security Plan, (Rev1), dated November 17, 2004, eliminates the self-imposed requirement for a Security Buffer Area and will be incorporated into License Condition 54. [ref: CD04-0508; November 17, 2004]

### 4. Revision to the License's ALARA Program

The DRC has reviewed the changes to the License's ALARA Program, which is part of the License Renewal Application. In letter dated August 27, 2003, Envirocare provides justification as to why the 50 mrem per quarter investigation level requirement can be eliminated. The DRC has inspected the license's direct reading electronic alarming dosimeters in conjunction with the automated Health Physics tracking software program and accepts the License's justification. In addition, the DRC has reviewed Envirocare's changes to the ALARA Program dated December, 2004, (Rev.6) submitted on December 17, 2004, and concurs with the changes.

In addition, on February 28, 2005 Envirocare submitted a request to revise Section 7 of their RML Application. The request was regarding language that references the 50 mrem per quarter investigation level. The DRC concurs with the changes for consistency and the removal of references to procedures that have been replaced or renamed. [Ref: CD03-0370; dated August 27, 2003: CD03-0454; dated November 5, 2003: CD05-0095; dated February 28, 2005].